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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,415	10/25/2001	John Zukley	3195	2598
22474	7590	12/04/2003	EXAMINER	
DOUGHERTY, CLEMENTS & HOFER 1901 ROXBOROUGH ROAD SUITE300 CHARLOTTE, NC 28211			ALIE, GHASSEM	
			ART UNIT	PAPER NUMBER
			3724	4
DATE MAILED: 12/04/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/002,415	ZUKLEY, JOHN
	Examiner Ghassem Alie	Art Unit 3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 September 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: an imaging device 61 on page 6, line 2.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference number 70 in Figs. 2-4.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

3. The specification is objected to under 37 CFR 1.71 for not disclosing how the computer controls the movement of the cutting device in second station 50. There is an imaging device (not shown in The drawings) that digitally images the front side of the brick 42 in order to determined the orientation of the brick within the clamping device 58 in cutting station 56 and to identify the interface between the mortar thereon. See page 6, lines 1-10 in the specification. It is not clear how the inputted digital data from the imaging device to the computer is sufficient enough to control the operations in all the stations including first cutting station and the transport device. The first cutting station does not have an imaging device and the mortar is being cut from the brick without a imaging device and the communication with the computer. The brick is manually fed onto the first cutting station. Therefore, it is not clear how the operation of the cutting device one is totally automated. The

specification also fails to teach how bricks are automatically loaded onto the transport device. How the bricks are automatically unloaded from the transfer device? How the second clamping device automatically picking the bricks from the flat surface of the transfer device?

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claims 1 and 17, the specification fails to teach how the first cutting device is controlled by a computer since the bricks are fed manually into the first cutting device. The manual loading of the brick determines the speed of the operation of the first cutting device. Therefore, it is not clear how computer can control the first cutting station without information about the operation status of the first cutting station. Is there any sensor or imaging device near the first cutting device that communicates with the computer? The only imaging device of the computer controlled automated system is located near the station three. It is also not clear how the computer controls the transport device. Is there also a sensor near the transport device with that communicates the position of the transfer device with the computer? It is not clear what factors determines the change in the operations of the cutting devices, clamping devices, and the transport device.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 1, "providing a computer controlled automates system" is not clear. Is not clear what is automated and controlled by the computer and what is not automated and not controlled by the computer. The computer controlled system includes a step of providing a first clamping device for holding a brick. It is not clear how the computer controls the holding of the brick by the clamping device. It is not clear how the first claming device is computer controlled since the bricks have to be manually fed into the first clamping device.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-12, 15, 17, 19, and 20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner (547,746) in view of Grant et al. (1,622,869), hereinafter Grant, and in view of Barr et al. (3,931,501), hereinafter Barr. Regarding claim 1, Turner teaches a method and apparatus of removing mortar from a brick including a first device e<sup>2</sup> for transferring the brick. The chain e<sup>2</sup> has feeding-lugs e<sup>3</sup> and positioning-lugs e<sup>4</sup> for pushing the bricks and carrying them toward the cutting rollers. Turner also teaches that the mortar is removed from the top and bottom, rear, and ends of the brick by cleaning-rolls

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B, C, and D. Turner also teaches transport devices e and h for transporting the brick from the first cutting device B to the second C and third D cutting devices. See Figs. 1and 2 and page 1, lines 32-65 and page 2, lines 6-110 in Turner. Note that the claim 1 does not state that the brick is held during the time that the mortar is removed from the brick. Turner does not teach a first clamping device to hold a brick and a second clamping device for holding a brick. Grant teaches two holding systems 47, 48 that hold the bricks 27. The holding device 47 and 48 in conjunction with the brick stops 44 clamp the bricks 27 and the mortar of the brakes are removed by the mortar remover 23. See Fig. 1 and col. page 1, lines 61-112 and page 2, lines 1-70 in Grant. It would have been obvious to a person of ordinary skill in the art to provide Turner's brick recycling apparatus with the first and second clamping device as taught by Grant in order to hold the brick steady while the mortar is removed from the rear, opposing ends, and top and bottom of the brick by the cutting stations. Turner also does not teach that the steps of removing the mortar is automated and controlled by a computer. However, computer controlled cutting devices are well known in the art such as taught by Barr. Barr teaches cutting apparatus 20 including an imaging device 70, transport device 51, and marking pens 129, 130 which are all automated and controlled by the computer 24. The scanner assembly scans the workpiece 26 and the image of the workpiece is transferred to the computer 24 and the computer identifies the defect in the workpiece 26. The marking pens mark the selected cutting pattern by the computer on the workpiece 26. Barr also teaches that the same cutting pattern signals generated by the computer 24 could be sent to cutters for trimming the defects of the workpiece 26. See Figs. 1, 2, 2a, 3, and 4, and col. 4, lines 12-67 and col. 1-35 and col. 8, lines 21-68 and col. 10, lines 11-37 in Barr. It would have been

obvious to a person of ordinary skill in the art to provide Turner's brick recycling apparatus with the imaging device, the computer, and computer controlled system as taught by Barr in order to facilitate the removing process of the mortars from the bricks.

Regarding claims 2-4, Turner as modified by Barr, teaches everything noted above including a step of determining the position of the brick and the interface between the brick and mortar. The imaging device 70 is capable of determining the position of the interface between the brick and mortar since it performs a similar function with the workpiece 26. The imaging device determines the orientation of the workpiece 26 and the interface between the workpiece 26 and the defects of the workpiece 26. See col. 5, lines 1-67 in Barr.

Regarding claim 5, Turner as modified by Barr, teaches everything noted above including that the imaging device 70 is capable of imaging the front face of the brick. See col. 5, lines 1-67 in Bar.

Regarding claims 6-8, Turner teaches everything noted above including that the mortar is removed from the top and bottom, rear, and ends of the brick by first cutting device B, the second cutting device C and the third cutting device D. See Figs. 1 and 2 and page 1, lines 32-65 and page 2, lines 6-110 in Turner.

Regarding claims 9 and 10, Turner teaches everything noted above including that the second cutting device C and the third cutting device D are pairs of saws. See Figs. 1 and 2 in Turner.

Regarding claim 11, Turner teaches everything noted above including that a first means and a second means for positioning the second cutting device C and the third cutting devices D in a position of removing the mortar from the brick. The roll b of the cutters C and

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D are defined as the positioning means for putting the cutters C and D in position of removing mortar from the brick. See Figs. 1 and 2 in Turner.

Regarding claim 12, Turner teaches everything noted above including that the first and the second positioning means moves the second cutting means C and the third cutting means D in three dimensional space. The positioning means b of the second cutting means C and the third cutting means D move the respective cutters in three dimensional space since the cutters would be clearly positioned in three dimensional space in view of the showing in Fig. 1 in Turner.

Regarding claim 15, Turner teaches everything noted above including at least one means (conveyor e and h) for transporting the brick between the first cutting device B and the second cutting device C and the third cutting device D. See Fig. 1 and 2 in Turner.

Regarding claim 17, as best understood, Turner as modified by Barr teaches everything noted above including that the cutting devices B, C, D, transport device (conveyor e, and h), and the imaging device 72 as taught by Barr are controlled by a computer 24. See Fig. 1 in Turner and Barr. The computer 24 controls the conveyor and the imaging device 70 and sends the signals to operate the cutting apparatus according to the imaging signals of the imaging device 70. See Figs. 1-4 and col. 4, lines 12-44 and col. 5, lines 6-35 and col. 10, lines 24-35 in Barr. Therefore, the computer as taught by Barr is capable of controlling the cutting devices and the transport device (conveyor e and h) as taught by Turner.

Regarding claims 19 and 20, Turner teaches everything in claims 9 and 12.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner in view of Jones (3,904,043). Regarding claim 16, Turner teaches everything noted above

except method of stacking unstacked bricks onto a pallet. However, stacking bricks or the like onto a pallet is well known in the art such as taught by Jones. Jones teaches a step of stacking bricks B, which are automatically loaded onto a loading conveyor 10. The bricks B are stacked to a pallet 70. The shuttle car 70 is a movable pallet. See Figs. 1-3 and col. 2, lines 46-68 and col. 6, lines 20-31 in Jones. It would have been obvious to a person of ordinary skill in the art to provide Turner's brick recycling apparatus with the stacking step as taught by Jones in order to facilitate the transport of the bricks.

11. Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner in view of Terbrugge et al. (5,018,504), hereinafter Terbrugge. Regarding claim 18, Turner teaches everything noted above except a movable trailer wherein the trailer houses the brick recycling apparatus. Terbrugge teaches a movable trailer 12, 14, 16 housing a brick recycling apparatus as shown in Fig. 1 in Terbrugge. It would have been obvious to a person of ordinary skill in the art to provide Turner's brick recycling apparatus with the trailer as taught by Terbrugge in order to drive the brick recycling apparatus to a construction site where recovery of the bricks takes place.

*Comments*

12. It is noted that claims 13 and 14 have not been rejected over prior art. However, in view of the issues under U.S.C. 112, the objection to the specification under 37 CFR 1.71, and the drawing objections, the allowability of claims 13 and 14 cannot be determined at this time.

*Response to Amendment*

13. Applicant's arguments filed on 9/15/03 have been fully considered but they are not

persuasive. With respect to applicant's arguments regarding claims 1-12, 15, 17, 19, and 20, applicant's argument that Barr's controlled computer system is not combinable with the brick recycling system as taught by Turner is incorrect. Barr's computer controlled system facilitate the removing of the defected area of the workpiece. The imaging device as taught by Barr is a scanner that scans the workpiece and sends a digital signal to the computer. The computer determines the usable and unusable areas of the workpiece. Therefore, the computer controlled system as taught by Barr is also capable to determined the usable area of a brick and unusable area of the brick, which is the mortar. The computer controlled system as taught by applicant and the computer controlled system as taught by Barr both function the same since both of these systems facilitated the removal of the unusable section of the workpiece from the usable sections of the workpiece.

In addition, the computer 24 controls the conveyor and the imaging device 70 and sends the signals to operate the cutting apparatus according to the imaging signals of the imaging device 70. See Figs. 1-4 and col. 4, lines 12-44 and col. 5, lines 6-35 and col. 10, lines 24-35 in Barr. Therefore, the computer as taught by Barr is capable of controlling the cutting devices and the transport device (conveyor e and h) as taught by Turner.

Applicant's arguments with respect to the method of clamping the bricks and the method of stacking the bricks in claims 1 and 16 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lingl, Sr. (4,085,635), Potter et al. (3,067,731), Seeley (4,557,246), Lefevre (3,292,310), Gebhart (4,393,856), Bernath (4,700,758), and Mori (3,918,210), teach a method of removing mortar from a brick.

Abrahamson (4,178,122), Milholen (4,013,183), and Schnitt (4,068,766) teach a method of stacking the bricks or the like.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (703) 305-4981. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (703) 305-1082. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9302 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

GA/ga

November 26, 2003



Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700